

## ABSTRACT

The invention provides an arbitration unit adapted for controlling accesses to a shared storage. The arbitration unit comprises a set of interfaces adapted for connecting a plurality of units with said arbitration unit, wherein outgoing data streams are transmitted from the arbitration unit via respective ones of said  
5 interfaces to at least one of said units, and wherein incoming data streams are transmitted from at least one of said units via respective ones of said interfaces to the arbitration unit. A control logic is connected to each of said interfaces, said control logic being adapted for segmenting write data of incoming data  
10 streams in order to set up write accesses to said shared storage, for scheduling a sequence of at least one of write and read accesses to said shared storage, and for distributing read data obtained during said read accesses to outgoing data streams.

15 (Fig. 2 for publication)